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|--|-------------|----------------------|---------------------|------------------|
| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
| 09/894,601   | 06/28/2001  | Chang-Hoi Koo        | 678-699(P9824)      | 5106             |
| 28249  | 7590        | 11/01/2004           | EXAMINER            |                  |
| DILWORTH & BARRESE, LLP<br>333 EARLE OVINGTON BLVD.<br>UNIONDALE, NY 11553 |             |                      | ZHENG, EVA Y        |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2634                |                  |

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/894,601

Applicant(s)

KOO, CHANG-HOI

Examiner

Eva Yi Zheng

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-8, 24 and 25 is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-11, 13-16, 19-23, 26, 27 is/are rejected.
- 7) ☒ Claim(s) 12, 17, 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. Figure 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 6, 19, 25 and 27 are objected to because of the following informalities: Regarding claims 6, 19, 25 and 27, please delete word "the" in claim recitation: "the characteristics".

Appropriate correction is required.

3. Claim 10 is objected to because of the following informalities: please change "Ats" in claim recitation to --ATs--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5, 19-23 and 27 are rejected as being lack of antecedent basis.
  - a) Regarding claim 1, line 3, recitation: "the ATs". There is insufficient antecedent basis for this limitation in the claim.
  - b) Regarding claim 3, line 5, recitation: "the ignore RAB". There is insufficient antecedent basis for this limitation in the claim.
  - c) Claims 2 and 4-5 are rejected based upon independent claims 1 and 3.
  - d) Regarding claim 19, line 8, recitation: "the AT type". There is insufficient antecedent basis for this limitation in the claim.
  - e) Claims 20-23 are rejected based upon independent claim 19.
  - f) Regarding claim 27, line 5, recitation: "the type of an AT". There is insufficient antecedent basis for this limitation in the claim.
6. Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On line 2-3, recitation: "a data rate higher than the current data rate below the data rate set in the RRL message is selected" is unclear and confusing of what data is selected.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

8. Claims 9, 10, 11, 13 -15, 19, 26 and 27 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicant Admitted Prior Art (AAPR).

a) Regarding claim 9, AAPA discloses a reverse data rate controlling method in a plurality of ATs in a data communication system between an AN and the ATs, comprising the steps of:

receiving an RAB indicating increase or decrease of reverse data rates (110 in Fig. 1; Table 2) from the AN during transmitting data at the reverse data rates to the AN (Background: Pg 2, L 25 – Pg 3, L 24);

comparing access probabilities corresponding to the reverse data rates with random numbers generated in the ATs (116 and 118 in Fig. 1); and

increasing the reverse data rates for the respective AN and determining the data rate according to the comparison result (122 and 124 in Fig. 1) and transmitting data at the determined increased data rates (Background: Pg 4, L 22-24).

b) Regarding claim 13, AAPR discloses a reverse data rate controlling method in an AT in a mobile communication system, comprising the steps of:

establishing a reverse link with initial values (100 in Fig. 1), receiving an RRL message on a forward link, and storing access probabilities for data rates (102 in Fig. 1);

determining a reverse data rate by comparing a current data rate with a data rate set in the RRL message (104 in Fig. 1) and transmitting packet data at the determined reverse data rate (110 in Fig. 1); and

changing the reverse data rate according to the access probabilities based on the received data rate upon receipt of a RAB on the forward link (116, 118, 126, 128, 130, 132, 120, 122 and 124 in Fig. 1) .

c) Regarding claim 19, AAPR discloses a reverse data rate controlling method in a mobile communication system for transmission of packet data comprising the steps of:

analyzing the characteristics of an AT or a service in an initialization state for the AT and setting a MACindex for the AT on a forward MAC channel (100 and 102 in Fig.1);

generating an access probability for each data rate according to the AT type or the service characteristic (104, 106, 108 and 110 in Fig.1); and

assembling an RRL message with the access probabilities and transmitting the RRL message to the AT (116, 118, 120, 122, 124, 126, 128, 130 and 132 in Fig. 1).

d) Regarding claim 26, AAPA discloses in an access terminal (AT) apparatus for transmitting reverse packet data in a mobile communication system, a control procedure performed when transmitting the reverse packet data in the AT apparatus comprising the steps of:

establishing a reverse link with initial values (100 in Fig. 1), receiving an RRL message on a forward link, and storing access probabilities for data rates (102 in Fig. 1);

determining a reverse data rate by comparing a current data rate with a data rate set in the RRL message (104 in Fig. 1) and transmitting packet data at the determined reverse data rate (110 in Fig. 1); and

changing the reverse data rate according to the access probabilities upon receipt of a RAB on the forward link (116, 118, 126, 128, 130, 132, 120, 122 and 124 in Fig. 1) .

e) Regarding claim 27, AAPA discloses in an access terminal (AT) apparatus for transmitting reverse packet data in a mobile communication system, a control procedure performed when transmitting the reverse packet data in the AN apparatus comprising the steps of:

analyzing the type of an AT and the characteristics of a service in an initialization state for the AT and setting a MACindex for the AT on a forward MAC channel (100 and 102 in Fig.1);

generating an access probability for each data rate according to the characteristics of an AT or a service (104, 106, 108 and 110 in Fig.1); and

assembling an RRL message with the access probabilities and transmitting the RRL message to the AT (116, 118, 120, 122, 124, 126, 128, 130 and 132 in Fig. 1).

f) Regarding claim 10, AAPA discloses the reverse data rate controlling method of claim 9, wherein the ATs receive different access probabilities for different reverse data rates by an RRL message on a forward link (Background: Pg 2, L 25 – Pg 3, L 24).

- g) Regarding claim 11, AAPA discloses the method of claim 9, wherein the ATs establish the access probabilities, which are different access probabilities for different reverse data rates, as initial values (Background: Pg 2, L 25 – Pg 3, L 28).
- h) Regarding claim 14, AAPA discloses the reverse data rate controlling method of claim 13, wherein if the reverse data rate decrease is requested (116 in Fig. 1), a random number is generated, the random number is compared with the access probability for the current data rate (126 in Fig. 1), and the current data rate decrease if the comparison result satisfies a decrease condition (130 in Fig. 1).
- i) Regarding claim 15, AAPA discloses the reverse data rate controlling method of claim 14, wherein if the reverse data rate decrease is requested, a random number is generated, the random number is compared with the access probability for the current data rate (126 in Fig. 1), and the current data rate is kept if the comparison result does not satisfies a decrease condition (128 in Fig. 1).

***Allowable Subject Matter***

- 9. Claims 12, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 10. Claims 6-8, 24 and 25 are allowed.
- 11. The following is an examiner's statement of reasons for allowance:  
  
None of the prior art teaches or suggests a reverse data transmission system comprises a reverse link with initial values, receiving an reverse rate limit message



(RRL) on a forward link, analyzing and storing an ignore RAB field indicating whether an ATs should not change the reverse data rates from AN in at least one AT, determining a reverse data by comparing a current data rate with a data rate set in the RRL message, and changing the reverse data rate according to the value of the ignore RAB field upon receipt of an RAB on the forward link.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eva Yi Zheng whose telephone number is (571) 272-3049. The examiner can normally be reached on 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-879-9306.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Eva Yi Zheng  
Examiner  
Art Unit 2634

October 25, 2004



SHUWANG LIU  
PRIMARY EXAMINER